DIVISION OF INDUSTRY SERVICES
PO BOX 7162
MADISON WI 53707-7162
Contact Through Relay
www.dsps.wi.gov/sb/
www.wisconsin.gov

Scott Walker, Governor
Dave Ross, Secretary

October 02, 2013

CUST ID No. 1267533

MICHAEL HANSON
STERLING WATER INC CULLIGAN
1928 TRUAX BLVD
EAU CLAIRE WI 54703

ATTN: Plumbing Inspector

MUNICIPAL CLERK
TOWN OF EAGLE POINT
14802 STATE HWY 124
CHIPPEWA FALLS WI 54729

CONDITIONAL APPROVAL
PLAN APPROVAL EXPIRES: 10/02/2015

Identification Numbers
Transaction ID No. 2306786
Site ID No. 795391
Please refer to both identification numbers, above, in all correspondence with the agency.

SITE:
DJ's Mart
14983 Cty Hwy S
Town of Eagle Point, 54729
Chippewa County
FOR:
Facility: 735330 DJS MART
14983 CTY HWY S
EAGLE POINT 54729

1 Interior Fixture(s)

Object Type: Commercial Water Treatment Device Regulated Object ID No.: 1448820

The submittal described above has been reviewed for conformance with applicable Wisconsin Administrative Codes and Wisconsin Statutes. The submittal has been CONDITIONALLY APPROVED. The owner, as defined in chapter 101.01(10), Wisconsin Statutes, is responsible for compliance with all code requirements.

No person may engage in or work at plumbing in the state unless licensed to do so by the Department per s.145.06, stats.

The following conditions shall be met during construction or installation and prior to occupancy or use:

- This product has undergone sufficient testing to document the product's ability to reduce only those contaminants and/or substances as specified in this approval letter when the product is installed and maintained in strict accordance with the manufacturer's published instructions.
- Where the Department of Natural Resources (DNR) has jurisdiction, a written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 267-9787.
- If this approved device is modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.

- This installation must undergo a final inspection prior to the device being put into service. The Plumbing Consultant having jurisdiction in this area is Don Hough. Mr. Hough can be contacted via the following:

  Phone: 715-634-4804
  Fax: 608-283-7451
  E-mail: don.hough@wi.gov

  When the final inspection has been completed, this department will notify the Wisconsin Department of Natural Resources (WDNR). The WDNR will then monitor the performance of the device(s) to its satisfaction. A suggested frequency and overall duration of monitoring is provided elsewhere in this letter.

  If these devices are installed and used to treat water for consumptive purposes prior to obtaining a final inspection, then any pertinent approval for the site specific device is immediately rendered null and void and the device may be ordered removed.

- When the final inspection has been passed, the Plumbing Consultant will notify the Wisconsin Department of Natural Resources (WDNR) Field Staff having authority over the well. The WDNR will then monitor the quality of the treated water to its satisfaction. Monitoring advice, which the WDNR is free to accept or reject, is provided elsewhere in this letter. The WDNR Field Staff having authority over this well is Amy Lesik. Ms. Lesik can be contacted via the following:

  Phone: 715-839-2906
  E-mail: amyl.lesik@wisconsin.gov

- The suggested monitoring interval for this installation is quarterly. As a minimum, the following tests should be performed:

  1. nitrate 2. copper

  The samples should be collected at a time of day when the device is under stress and at a time most remote from the last regeneration cycle as possible. Because this device is reportedly being installed on a copper water supply system, concerns relating to decreased alkalinity and subsequent corrosion are applicable. The purpose of the sodium carbonate ($NaCO_3$), commonly referred to as "soda ash", injection is to mitigate this potential effect. If copper is detected, then lead samples should also be collected. Lead and copper corrosion samples should be collected in accordance with the USEPA's Lead/Copper Rule (i.e. overnight dwell samples most remote from the point of entry as possible).

TABLE 1 OF 1
NITRATE REDUCTION CAPABILITIES

Model Number	Salt 1 (lbs.)	Capacity 1♦ (grains)	Max. Flow* (gpm) @ ΔP (psig)	Capacity/Regeneration (gals.)
HE-60 1.5	16.0	26,600	12.0 @ 7.0	1,900

*** = A flow restrictor must be installed to prevent exceeding the flow rates displayed**
♦ = capacities listed at 25% SO_4^{2-}
1 grain = 64.79891 mg
1 grain/gal. = 17.1 mg/l

- No bypass piping, serving the nitrate reduction device, shall be installed. However, bypass piping may be installed for the water softener.

- Flow controls shall be installed to preclude each nitrate reduction device from exceeding is maximum rated service flow rate (i.e. 13 gpm).

- Any water treatment chemicals injected into the potable water supply shall conform to ANSI/NSF Standard 61.

- Any wall hydrant that is not served by the nitrate treatment device must have one, or more, of the following:
  1. The handles of the hydrant shall be removed;
  2. The hydrant shall be capped and sealed using solder; or
  3. Signage shall be posted immediately above the hydrant indicating the water is unfit for human consumption.
- All water distribution piping shall be marked as required by Table SPS 382.40-1a. This is in addition to any signage/labeling that may be required by the WDNR via a notification requirement or nitrate waiver.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

In granting this approval the Division of Industry Services reserves the right to require changes or additions should conditions arise making them necessary for code compliance. As per state stats 101.12(2), nothing in this review shall relieve the designer of the responsibility for designing a safe building, structure, or component. Inquiries concerning this correspondence may be made to me at the telephone number listed below, or at the address on this letterhead.

A copy of the approved plans, specifications and this letter shall be on-site during construction and open to inspection by authorized representatives of the Department, which may include local inspectors. If plan index sheets were submitted in lieu of additional full plan sets, a copy of this approval letter and index sheet shall be attached to plans that correspond with the copy on file with the Department. If these plans were submitted in an electronic form, the designer is responsible to download, print, and bind the plans along with our approval letter. A department electronic stamp and signature shall be on the plans which are used at the job site for construction. All permits required by the state or the local municipality shall be obtained prior to commencement of construction/installation/operation.

Sincerely,

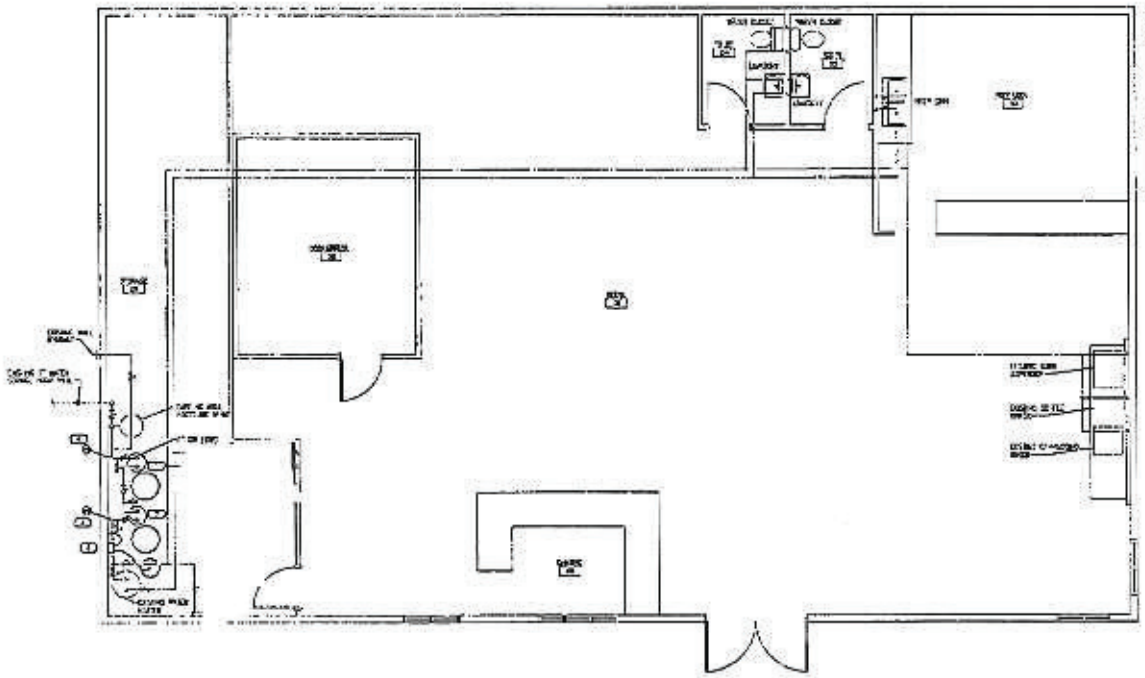
Glen W. Schlueter
Plumbing Product Reviewer
Department of Safety and Professional Services
Division of Industry Services
Bureau of Technical Services
(608) 267-1401 Phone
(608) 266-2602 Fax
glen.schlueter@wi.gov E-mail

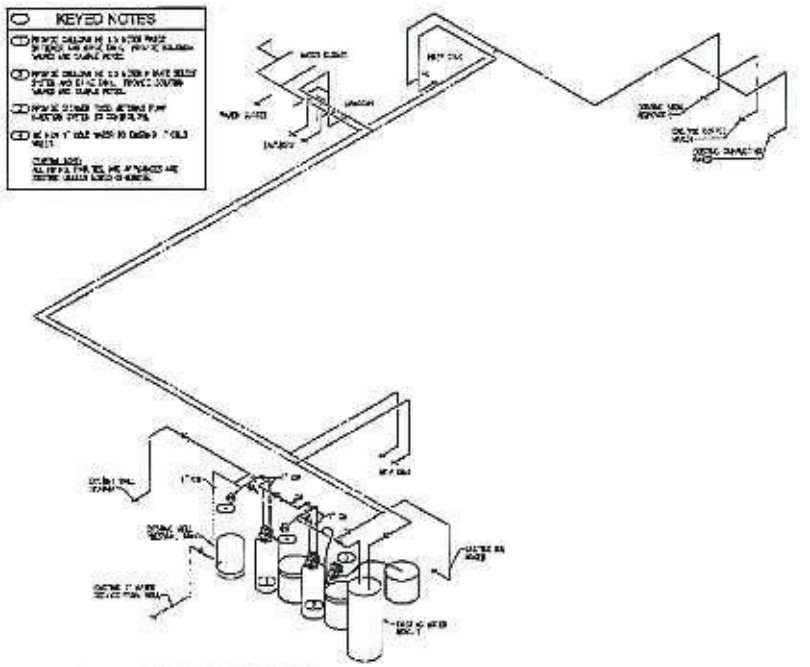
Fee Required $	160.00
Fee Received $	160.00
Balance Due $	0.00

WiSMART code: 7657

cc: Fuel Service DJs Mart LLC
Donald D Hough, Plumbing Consultant II, (715) 634-4804
Sterling Water Inc

Conditionally APPROVED
DIVISION OF SAFETY AND BUILDINGS
SEE CORRESPONDENCE





1 ABOVE GRADE PLUMBING PLAN

2 WATER PLUMBING ISOMETRIC

Conditionally
APPROVED
DIVISION OF SAFETY AND BUILDINGS
SEE CORRESPONDENCE

Culligan

better water. pure and simple.

DJ's Mart

October 22, 2013

Supply Fixture list:

- Men's Bathroom, Flush Tank (3)
- Men's Lavatory (1)
- Women's Bathroom, Flush Tank (3)
- Women's Lavatory (1)
- Coffee Maker (.5)
- Cappuccino Machine (.5)
- Soda Fountain hookup (.5)
- Kithcen and Food Prep Sink (3)

Total Fixture count: **12.5**

Conditionally APPROVED
DIVISION OF SAFETY AND BUILDINGS
SEE CORRESPONDENCE

Water Calc. Worksheet

Name of Project

INFORMATION REQUIRED TO SIZE WATER SERVICE AND WATER DISTRIBUTION:

1-	Demand of building in water supply fixture units (WSFU);	(WSFU)	12.5
1.a.	Demand of building in WSFU converted to Gallons Per Minute: (Table SPS 382.40-3)	(GPM)	10
2-	Elevation difference from main or external pressure tank to building control valve;	(feet)	4'
3-	Size of water meter (when required) 5/8"____ 3/4" ____ 1" ____ other ____		N/A
4-	Developed length from main or external pressure tank to building control valve;	(feet)	N/A
5-	Low pressure at main in street or external pressure tank.	(psi)	45

CALCULATE WATER SERVICE PRESSURE LOSS
(unnecessary for internal pressure tanks)

6-	Low pressure at main in street or external pressure tank. (value of # 5 above)		45
7-	Determine pressure loss due to friction in 1" inch diameter water service. Water service piping material is COPPER Pressure loss per 100 ft. = 10 X 0.1 (decimal equivalent of service length, i.e. 65 ft = 0.65)	**Subtract value of "7"**	1
		Subtotal	44
8-	Determine pressure loss or gain due to elevation, (multiply the value of # 2 above by .434)	**Subtract value of "8"**	1.74
9-	Available pressure after the bldg. control valve.	Subtotal	42.26

CALCULATE THE PRESSURE AVAILABLE FOR UNIFORM LOSS (VALUE OF "A")

B.	Available pressure after the bldg. control valve. (from "9" above)	Value of "B"	42.26
C.	Pressure loss of water meter (when meter is required)	**Subtract value of "C"**	0.0
		Subtotal	42.26
D.	Pressure at controlling fixture*. (Controlling fixture is: _____). (*Contolling fixture is the fixture with the most demanding pressure to operate properly which includes the following when determining fixture performance; loss due to instantaneous water heaters, water treatment devices, and backflow preventers which serve the controlling fixture.)	**Subtract value of "D"**	8
		Subtotal	34.26
E.	Difference in elevation between building control valve and the controlling fixture in feet; _____ X .434 psi/ft.	**Subtract value of "E"**	0
		Subtotal	34.26

Conditionally APPROVED
DIVISION OF SAFETY AND BUILDINGS
SEE CORRESPONDENCE

Water Calc Worksheet _____

Name of Project

F. Pressure loss due to water treatment devices and backflow preventers which serve the controlling fixture. (Water softeners, filters, etc.)

(Pressure loss due to; Nitrate/Softening System).

F1. WSFU Downstream of Water Treatment Device; 12.5

F2. Convert wsfu to GPM using **Table 382.40-3**: 10

or

F3. Convert wsfu to GPM using **Table 382.40-3e*** _____
(For individual dwellings only)

F4. Refer to manuf. graph to obtain pressure loss: 9
(If no water treatment device enter "0")

Subtract value of F4 9

Subtotal 25.26

G. Pressure loss through tankless water heaters, combination boiler / hot water heaters, heat exchangers which serve the controlling fixture;

Hot water WSFU's; _____ convert to; GPM = _____ (Table 382.40-3)
Refer to manufacturer's pressure loss graph to determine loss at the required GPM;

_____ pressure loss. **Subtract value of "G"** 0

Subtotal 25.26

H. Developed length from building control valve to controlling fixture in feet 80' X 1.5 **Divide by value "H"** 120

Subtotal 0.2105

Multiply by: 100

A. Pressure available for uniform loss **"A" =** 21.05

Water distribution piping is: COPPER

*Note: The "A" value obtained by using Table 382.40-3e can only be used for an individual dwelling when sizing the water treatment device (water softeners, etc) and no hose bibbs, hydrants, or high flow fixtures are being served by the water treatment device.

Note: High flow fixtures are defined as fixtures that exceed a flow rate of 4 gpm @ 80 psi, and water velocity not exceeding 8 ft. per second.

SBD -6479 (R01/12) (page 2 of 2)

Conditionally APPROVED
DIVISION OF SAFETY AND BUILDINGS
SEE CORRESPONDENCE